

CLEAN COPY OF AMENDED AND NEW CLAIMS

1. (Amended) A method for dewatering thermophilic biological sludge, comprising:
 - a. adding a primary component to the thermophilic biological sludge; said primary component comprising at least one of aluminum sulfate and ferric chloride; wherein
said primary component may also comprise a polyquaternary ammonium compound; and
 - b. adding a cationic or anionic polyacrylamide to the thermophilic biological sludge.
2. (Amended) The method for dewatering thermophilic biological sludge according to claim 1, wherein the polymeric quaternary ammonium compound is of the di-allyl dimethyl ammonium chloride (DADMAC) variety.
3. (Amended) The method for dewatering thermophilic biological sludge according to claim 1, wherein the polymeric quaternary ammonium compound is of the epichlorohydrin dimethyl amine (epi-DMA) variety.
4. (Amended) The method for dewatering thermophilic biological sludge according to claim 1, wherein said primary component is added directly to the sludge and, upon formation of microflocs of said thermophilic biological sludge from said primary component, said cationic polyacrylamide is added.
5. (Amended) The method for dewatering thermophilic biological sludge according to claim 1, wherein the ratio of the polymeric quaternary ammonium compound with respect to aluminum sulfate range from about 1:1 to about 1:20, by weight.
6. (Amended) The method for dewatering thermophilic biological sludge according to claim 1, wherein the ratio of the polymeric quaternary ammonium compound with respect to ferric chloride range from about 1:1 to about 1:20, by weight.

7. (Amended) The method for dewatering thermophilic biological sludge according to claim 1, wherein the ratio of the polyacrylamide with respect to aluminum sulfate range from about 1:80 to about 1:8 by weight.
8. (Amended) The method for dewatering thermophilic biological sludge according to claim 1, wherein the ratio of the polyacrylamide with respect to ferric chloride range from about 1:70 to about 1:7 by weight.
9. (Amended) The method for dewatering thermophilic biological sludge according to claim 1, wherein the polymer concentration to solids ratio of total polymer dosage requirement in relationship to percentage of solids component of said thermophilic biological sludge is between about 50 ppm:1 percent and about 5000 ppm:1 percent.
10. (Amended) The method for dewatering thermophilic biological sludge according to claim 1, wherein said primary component is added directly to said thermophilic biological sludge in an amount sufficient to cause formation of a cationic overcharge within a developed micro floc system, then said anionic polyacrylamide is added.
11. (Amended) The method for dewatering thermophilic biological sludge according to claim 10, wherein said primary component and said anionic polyacrylamide are in an approximately 1:8 to 20:1 ratio, by weight.
12. (Amended) The method for dewatering thermophilic biological sludge according to claim 10, wherein the polymer concentration to solids ratio of total polymer dosage requirement in relationship to percentage of solids component of said thermophilic biological sludge is between approximately 50 ppm:1 percent and approximately 5000 ppm:1 percent.
13. (Amended) The method for dewatering thermophilic biological sludge according to claim 1, wherein the thermophilic biological sludge is mixed with primary sludge.

15. (Amended) The method for dewatering thermophilic biological sludge according to claim 1, wherein said primary component and said polyacrylamide is used in solution, in emulsion or in dry form.

16. (New) A sludge composition, comprising:
water;
solids comprising thermophiles;
aluminum sulfate; and
polyacrylamide.

17. (New) A sludge composition, comprising:
water;
solids comprising thermophiles;
ferric chloride; and
polyacrylamide.

18. (New) A sludge composition, comprising:
water;
solids comprising thermophiles;
aluminum sulfate and ferric chloride; and
polyacrylamide.

19. (New) The sludge of claims 16, 17, or 18, including:
a polyquaternary ammonium compound.

20. (New) The sludge of claim 19, wherein the polyquaternary ammonium compound is of the DADMAC variety and/or the Epi-DMA variety.

21. (NEW) The sludge of claims 16, 17 or 18, wherein said polyacrylamide is cationic or anionic.